

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Hazardous Site Control
Additions/Change to Registry Summary of Approvals

Site Name Dutchess Co. AIRPORT DEC I.D. Number 314023

Current Classification 2a

Activity Add as Class Reclassify to Delist Category Modify

Approvals.

Regional Hazardous Waste Engineer Yes No

NYSDOH Yes No

DEE Yes No

BHSC: a. Investigation Section Yes No

b. Site Control Section Robert Manning Date 2/7/92

c. Director [Signature] Date 2/10/92

DHWR Assistant Director Charles Doherty Date 2/11/92

letter mailed 2/18/92

For Proposed Class 2a Sites Only:

Anticipated Action: _____

By Whom: _____

Time Frame: _____

ADDITIONS/CHANGES TO REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES

1. SITE NAME <u>Dutchess County Airport Balefill</u>		2. SITE NO. <u>314023</u>		3. TOWN <u>Wappinger</u>		4. COUNTY <u>Dutchess</u>	
5. REGION <u>3</u>		6. CLASSIFICATION Current <u>2a</u> / Proposed <u>D1</u>		7. ACTIVITY <input type="checkbox"/> Add <input type="checkbox"/> Reclassify <input checked="" type="checkbox"/> Delist <input type="checkbox"/> Modify			
8a. DESCRIBE LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location). The site is located between the Dutchess County Airport and Wappinger Creek, to the northwest of the airport off Citation Drive.							
b. Quadrangle <u>Poughkeepsie</u>		c. Site Latitude <u>41°37'40"</u>		Longitude <u>73°53'30"</u>		d. Tax Map Number <u>-</u>	
9a. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations) The site served as the disposal area for baled municipal waste generated in Dutchess County. The balefill was operated by the Dutchess County DPW during 1976 and 1977. Waste was baled by Dutchess Sanitation, Inc. Upon closure, the site was capped and seeded, though the sides are very steeply sloped. A healthy vegetative cover is growing over the site.							
b. Area <u>2 1/4</u> acres		c. EPA ID Number <u>NYD982530529</u>		d. PA/SI <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
e. Completed: <input checked="" type="checkbox"/> Phase I <input checked="" type="checkbox"/> Phase II <input type="checkbox"/> PSA <input type="checkbox"/> Sampling							
10. BRIEFLY LIST THE TYPE AND QUANTITY OF THE HAZARDOUS WASTE AND THE DATES THAT IT WAS DISPOSED OF AT THIS SITE No documentation of hazardous waste disposal exists for the balefill. Waste accepted was likely mixed residential, commercial, and industrial in nature. Sample results from the Phase II are not indicative of hazardous waste disposal at this site.							
11a. SUMMARIZED SAMPLING DATA ATTACHED <input type="checkbox"/> Air <input checked="" type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Surface Water <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Waste <input type="checkbox"/> EP Tox <input type="checkbox"/> TCLP							
b. List contravened parameters and values Several inorganic parameters are above the standards, but the levels do not suggest the disposal of hazardous waste. See attached analytical summaries.							
12. SITE IMPACT DATA							
a. Nearest surface water: Distance <u>200</u> ft.		Direction <u>north and west</u>		Classification <u>B</u>			
b. Nearest groundwater: Depth <u>6</u> ft.		Flow Direction <u>west</u>		<input type="checkbox"/> Sole Source		<input type="checkbox"/> Primary <input type="checkbox"/> Principal	
c. Nearest water supply: Distance <u>600</u> ft.		Direction <u>southeast</u>		Active <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
d. Nearest building: Distance <u>600</u> ft.		Direction <u>southeast</u>		Use <u>commercial</u>			
e. Crops or livestock on site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		j. Within a State Economic Development Zone? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
f. Exposed hazardous waste? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		k. For Class 2a: Code _____ Health Model Score _____					
g. Controlled site access? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		l. For Class 2: Priority Category _____					
h. Documented fish or wildlife mortality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		m. HRS Score _____					
i. Impact on special status fish or wildlife resource? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		n. Significant Threat <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown					
13. SITE OWNER'S NAME <u>Dutchess County</u>			14. ADDRESS <u>22 Market St., Poughkeepsie, NY 12601</u>			15. TELEPHONE NUMBER () _____	
16. PREPARER <u>Lawrence J. Alden</u> Environmental Engineer 2 NYSDEC Name, Title and Organization <u>2/15/91</u> <u>Lawrence Alden</u> Date Signature							
17. APPROVED <u>John B. Swartwout</u> , Chief, Eastern Investigation Section Name, Title and Organization <u>2/28/91</u> <u>John B. Swartwout</u> Date Signature							

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: D1

REGION: 3

SITE CODE: 314023

EPA ID:

NAME OF SITE : Dutchess County Airport Balefill

STREET ADDRESS: Airport Park

TOWN/CITY:

Wappinger

COUNTY:

Dutchess

ZIP:

12590

SITE TYPE: Open Dump- Structure- Lagoon- Landfill-X Treatment Pond-

ESTIMATED SIZE: 2.25 Acres

SITE OWNER/OPERATOR INFORMATION:

CURRENT OWNER NAME....: Dutchess County

CURRENT OWNER ADDRESS.: 22 Market Street, Poughkeepsie, NY

OWNER(S) DURING USE...: Dutchess County

OPERATOR DURING USE...: Dutchess County DPW

OPERATOR ADDRESS.....: 22 Market Street, Poughkeepsie, NY

PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From To

SITE DESCRIPTION:

This landfill for baled wastes is situated on approximately 55 acres of land owned by Dutchess County. The landfill was operated by the Dutchess County Department of Public Works during 1976-1977. The site is bounded by Wappingers Creek on the north and west and Jackson Road to the south. The Dutchess County Airport is adjacent to the eastern perimeter. Wappingers Creek separates the site from a residential area. Phase I and II investigations have been completed. The Phase II confirmed no release of hazardous constituents from the site in either groundwater wells, surface water or nearby sediments. There has been no documented disposal of hazardous waste at this site.

HAZARDOUS WASTE DISPOSED: Confirmed-
TYPE

Suspected-
QUANTITY (units)

ANALYTICAL DATA AVAILABLE:

Air- Surface Water-X Groundwater-X Soil- Sediment-X

CONTRAVENTION OF STANDARDS:

Groundwater- Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE...: State- Federal-
STATUS: Negotiation in Progress- Order Signed-

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-
NATURE OF ACTION:

GEOTECHNICAL INFORMATION:

SOIL TYPE:

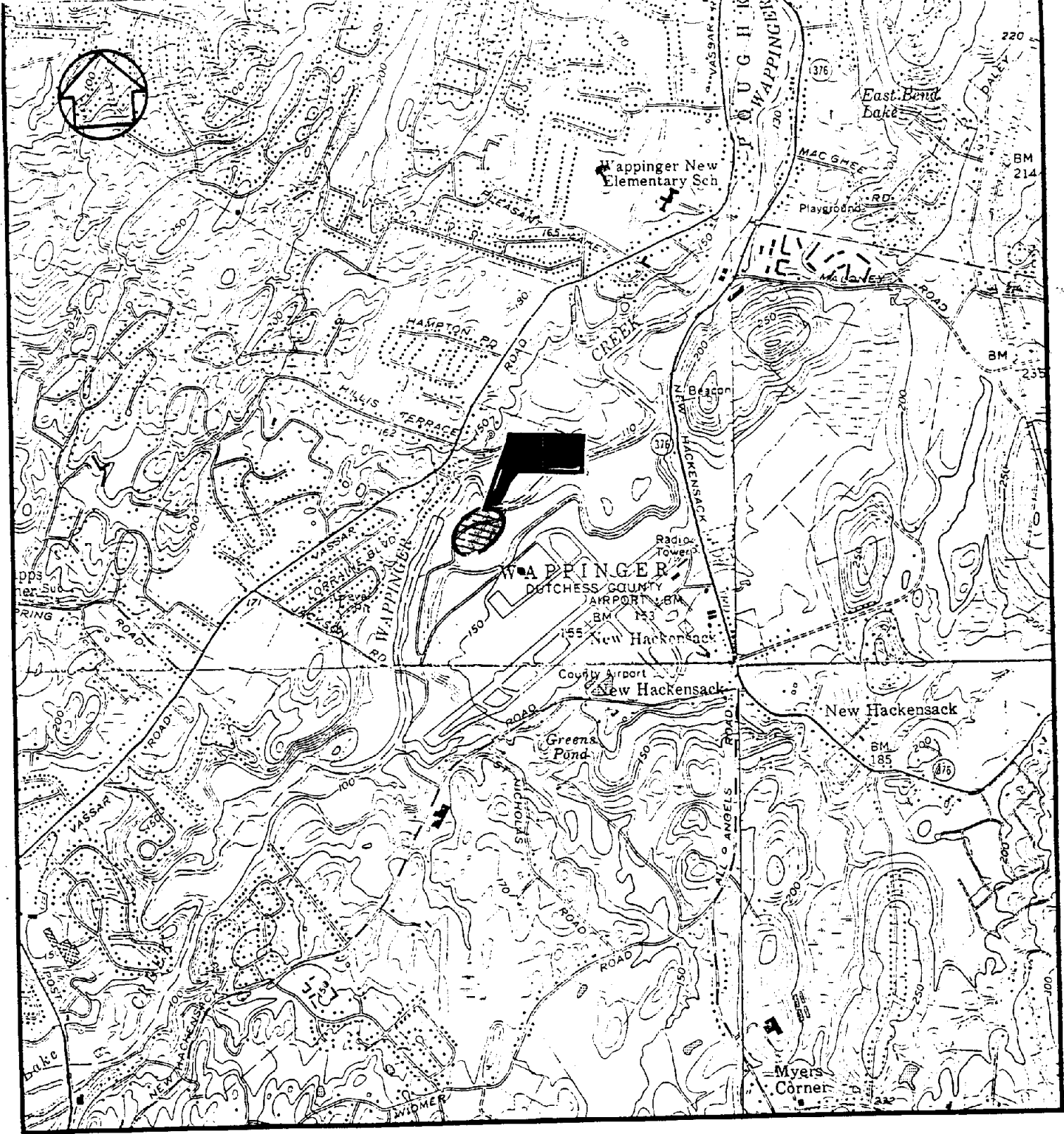
GROUNDWATER DEPTH:

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

The Phase II confirmed no release of hazardous constituents from the site. There are no environmental problems associated with the disposal of hazardous waste at this site.

ASSESSMENT OF HEALTH PROBLEMS:

Use of this site was discontinued in 1977 in part due to the potential for impact on the Atlas Water Company Wells located 2000 feet away. Poor site location and operation has lead to leachate seeps discharging into Wappingers Creek. Sampling of the Atlas well in 1986 by the NYSDOH did not detect organic or inorganic contamination of these wells. Phase II sampling of groundwater at the site detected low levels of phenol (17 ug/l) in one downgradient well, other volatile organic compounds were detected in the 1 to 2 ug/l range in groundwater. Dutchess County DOH has completed a sampling program of private wells in the vicinity of the airport and has found none to be contaminated.



TOPOGRAPHY TAKEN FROM
 PLEASANT VALLEY, N.Y. 1957
 (PHOTO REVISED 1981)
 HOPEWELL JUNCTION, N.Y. 1957
 (PHOTO REVISED 1981)
 WAPPINGERS FALLS, N.Y. 1956
 (PHOTO REVISED 1981)
 POUGHKEEPSIE, N.Y. 1957
 (PHOTO REVISED 1982)
 U.S.G.S QUADRANGLE
 7.5 MIN. SERIES

SCALE: 1"=2000'



MAP LOCATION

FIGURE 1-1

SITE MAP LOCATION

**DUTCHESS COUNTY AIRPORT
BALEFILL**

LAT. 41 37' 40" LONG. 73 53' 30"

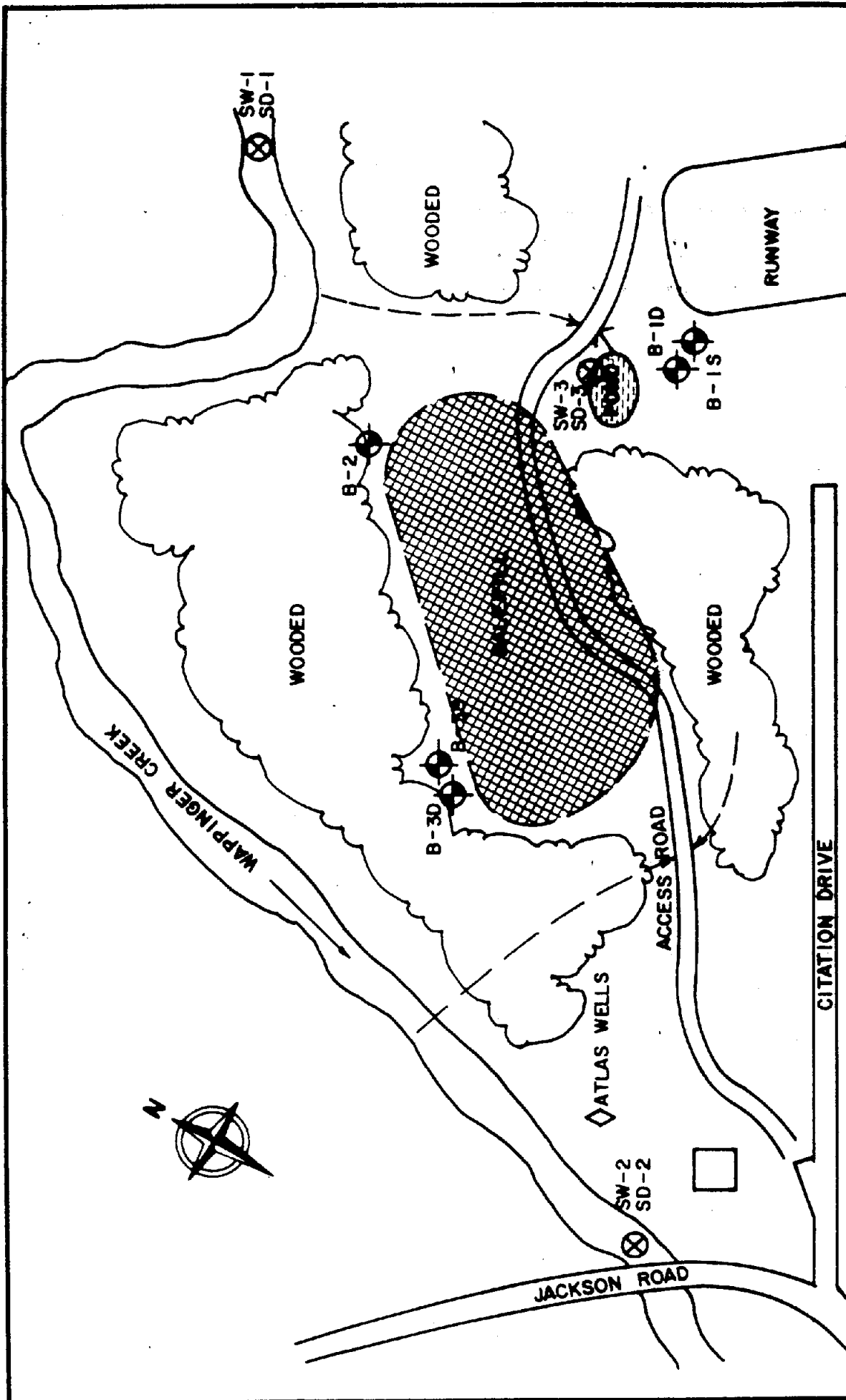


FIGURE 1-2
SITE SKETCH
DUTCHESS COUNTY
AIRPORT BALESFIELD
M.T.S.

B-1S MONITORING WELL LOCATION AND NUMBER
SW-1 SURFACE WATER SAMPLE AND NUMBER
SD-1 SEDIMENT SAMPLE AND NUMBER
CESSNA AIRCRAFT FACILITY

1.0 EXECUTIVE SUMMARY

The Dutchess County Airport Balefill (New York Site Code: 314023) is located on Citation Drive in the Town of Wappinger, Dutchess County, New York (Figure 1-1). The site is a 2.25-acre landfill for baled refuse situated on approximately 55 acres of land owned by Dutchess County adjacent to the Dutchess County Airport. The balefill was operated by Dutchess County Department of Public Works during 1976-1977. The site was approved by NYSDEC (May 1976) for the disposal of baled residential, commercial, and dry industrial refuse generated in Dutchess County. It was not approved for industrial processes waste or hazardous materials. Baling was done by Dutchess Sanitation, Inc. The site was reportedly developed in accordance with NYSDEC-approved engineering plans and specifications, and was inspected frequently by representatives of the Dutchess County Department of Health to enforce compliance with operational requirements. However, there are no records indicating that the baling operation at Dutchess Sanitation was monitored or that daily inspections of disposal at the site was performed.

The site is bounded by Wappinger Creek on the north and west and Jackson Road to the south. The Dutchess County Airport is adjacent to the eastern perimeter of the site (Figure 1-2). Wappinger Creek separates the site from a residential area.

The balefill is capped and covered with thick vegetation. The balefill has steep sideslopes and some erosion channels exist. A drainage ditch, leading to Wappinger Creek, is directed along the southern perimeter of the balefill. Directly northeast of the balefill is a small pond, approximately 50 feet by 150 feet in size which receives runoff from the airport runway.

The Dutchess County Department of Health conducted sampling of the on-site drainage ditch. The results indicated high levels of iron and chemical oxygen demand (COD). A sample collected on July 14, 1981 detected a trace of trichloroethylene in a drainage ditch at the site. The Atlas Water Company wells, which are analyzed routinely for inorganics, have been maintaining background levels since 1961. However, organic sampling has never been conducted on the water supply wells.

The specific geology of the site was determined from information obtained during the drilling of five monitoring wells during the Phase II investigation. Materials encountered include alluvial deposits, glacial till, glaciolacustrine deposits, and bedrock consisting of slate and phyllite of the Hudson River formation. Three of the wells were completed in the overburden and two in bedrock. Water level data suggest hydraulic connection between the unconsolidated sediments and the bedrock. Water levels ranged from about 6 feet to 13 feet below surface level. Groundwater flows to the west and north towards the creek.

Laboratory analysis of groundwater, surface water, and sediment samples collected during the Phase II investigation did not confirm a release of hazardous constituents from the site.

Residents within three miles of the site depend on wells for drinking water. The population served by wells within a three-mile radius of the site is about 10,940. The closest potable well is located approximately 600 feet from the site at the Cessna Citation Service Center. The Atlas Water Company wells, which are situated approximately 1,500-2,000 feet downstream of the site, draw from groundwater 50 feet below the elevation of Wappinger Creek. They serve as a major source of private water supply for approximately 1,300 residents in the Town of Wappinger.

Based on available data, the Hazard Ranking System (HRS) scores for this site are as follows: $S_M = \text{No Score}$ ($S_{gw} = \text{No Score}$, $S_{sw} = \text{No Score}$, $S_a = 0$) $S_{FE} = 0$, and $S_{DC} = 0$. "No Score" was assigned where a score could not be calculated due to lack of documentation of hazardous wastes at the site.

Although the available data do not suggest that the balefill is a source of hazardous constituents, upgrading the existing cover should be considered to reduce the potential for contaminant discharge to groundwater and/or surface water. A monitoring program should be implemented in the interim.

TABLE 4-3 (Page 2)

DUTCHESS COUNTY AIRPORT BALEFILL
 SUMMARY OF HAZARDOUS SUBSTANCE LIST
 ORGANIC COMPOUNDS DETECTED

CAS Number	Compound	Groundwater, ug/l						Surface Water, ug/l			Sediments ug/kg		
		B-1S	B-2	B-3S	B-1D	B-3D	SW-1	SW-2	SW-3	SD-1	SD-2	SD-3	
117817	Bis(2-ethylhexyl)phthalate			51B		37B	64B		220B				
71556	1,1,1-Trichloroethane												
108952	Phenol					17							
8466-2	Diethylphthalate			6J									

Notes

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Blank spaces indicate compound not detected (see Appendix B for detection limits).

TABLE 4-4 (Page 1)

DUTCHESS COUNTY AIRPORT BAILEFILL
TENTATIVELY IDENTIFIED ORGANIC COMPOUNDS

CAS Number	Compound	Groundwater, ug/l						Surface Water, ug/l			Sediments ug/kg		
		B-1S	B-2	B-3S	B-1D	B-3D	SW-1	SW-2	SW-3	SD-1	SD-2	SD-3	
128370	2,6-bis(1,1-dimethylethyl)-4-methylphenol	8B	11B	18B	12B	12B	14B	10B	11B				
78400	Phosphoric acid triethyl ester			31									
498817	α, α-4-trimethyl cyclohexane methanol			35									
470655	4-methyl-1-(1-methylethyl)-cyclohexanol			7									
143077	Dodecanoic acid			6		78							
629925	Nonadecane			8	25								
80397	N-ethyl-4-methyl-benzene-sulfonamide			8									
112958	Eicosane			10									
105602	Hexahydro-2H-azepin-2-one				15	10							
128370	Hexadecane				30								
544763	Heptadecane				52	36							
111762	2-butoxy ethanol					29							
334485	Decanoic acid					14							
121335	4-hydroxy-3-methoxy-benzaldehyde					6.5							
90437	(1,1-Biphenyl)-2-ol					24							
55045095	7-propyl tridecane					25							
55045119	5-propyl tridecane					10							

TABLE 4-4 (Page 2)

DUTCHESS COUNTY AIRPORT BAILEFILL
TENTATIVELY IDENTIFIED ORGANIC COMPOUNDS

CAS Number	Compound	Groundwater, ug/l				Surface Water, ug/l			Sediments ug/kg			
		B-1S	B-2	B-3S	B-1D	B-3D	SW-1	SW-2	SW-3	SD-1	SD-2	SD-3
--	Propyl-tridecane isomer					13						
54833486	2,6,10,15-tetramethyl heptadecane											
2216333	3-methyl octane								7,600	8,200		5,100
2213232	2,4-dimethyl heptane									7,900		
	Total unknown	46	160	66	66	90.4			11,240	34,152		10,228

Notes

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Blank spaces indicate compound not detected.

TABLE 4-5

DUTCHESS COUNTY AIRPORT BALEFILL
INORGANIC ANALYSIS SUMMARY

Parameter	Groundwater, ug/l			Surface Water ug/l			Sediments, mg/kg				
	Well B-1S	Well B-2	Well B-3S	Well B-1D	Well B-3D	Sample SW-1	Sample SW-2	Sample SW-3	Sample SD-1	Sample SD-2	Sample SD-3
Aluminum	1,170	1,050	728	5,630	1,060	465		328	15,400	17,400	8,550
Arsenic											3.37
Barium	391	219	256	1,160	249				87.6		
Calcium	241,000	141,000	129,000	128,000	114,000	28,900	27,200	27,900	2,420		1,370
Chromium									14.6	40.9	10.2
Cobalt									15.8		
Copper				48.6					17.4	95.6	16.4
Cyanide									0.39	0.36	0.37
Iron	1,600	17,000	5,820	6,920	422	224	158	333	27,000	33,300	19,800
Lead	13.3	9.6	10.5	18.6	109	19.2	10.9	107	11.9	147	15.9
Magnesium	20,900	12,000	6,200	10,600	(1,390)	8,550	8,030	7,460	5,980	5,690	4,090
Manganese	5,010	16,400	6,040	1,430	162	33.1	68.7	72.4	466	1,070	710
Mercury	1.0			0.6							
Nickel									21.9	60.1	17.3
Potassium	18,200	(2,480)	39,200	15,600	57,100	(1,110)	5,000		(630)	(868)	(566)
Silver					11.6						
Sodium	47,500	7,200	171,000	79,200	89,100	12,700	11,000				
Vanadium									15.0	20.8	20.4
Zinc	23.3	70.4	63.7	141	37.1				73.8	360	327

NOTES

- Blank spaces indicate compound not detected (see Appendix B for detection limits).
- Parentical numbers indicate concentration values greater than or equal to the instrument detection limit, but less than the contract required detection limit.

TABLE 4-6

DUTCHESS COUNTY AIRPORT BALEFILL
ANALYTICAL RESULTS OF WATER QUALITY PARAMETERS*

Identification	Parameter						
	pH	Total Suspended Solids, mg/l	Total Dissolved Solids Dried at 180° C, mg/l	Chemical Oxygen Demand mg/l	Specific Conductance, umhos/cm	Total Solids (%)	Specific Gravity
B-1D	10.29	463	2,400	1.55	6,200		
B-1S	8.09	1,350	364	<1.0	470		
B-2	6.51	7,800	189	5.42	310		
B-3D	11.88	263	556	34.5	2,250		
B-3S	6.76	5,130	259	67.4	2,000		
SW-1	7.82	<1.0	164	<1.0	220		
SW-2	7.81	<1.0	161	1.55	225		
SW-3	8.34	4.6	143	<1.0	190		
Field Blank	7.53	1.6	<1.0	<1.0	10		
SD-1						78.09	4.52
SD-2						67.73	3.52
SD-3						80.77	4.86

*Samples collected March 6, 1986 by Wehran Engineering; see Figure 1-3 for sample locations.